Madroño, Vol. 52, No. 2, pp. 125–130, 2005

NOTEWORTHY COLLECTIONS

California

Carex pendula Hudson (CYPERACEAE).—BUTTE CO., mostly at the edge of the water, shaded by large valley oaks on bank and alders, forming discrete dense clumps, south side of city of Chico, along Comanche Creek (Edgar Slough) just SW of Meyers Ave, 195 ft, T22N R1E S36 SW¼, 23 Oct. 1989, *L. P. Janeway 3652* (CAS, CHSC, WS; the CAS dup det. A. A. Reznicek 26 Feb. 2003); shaded by riparian forest of valley oak, sycamore, forming massed dense clumps along edge of S side of creek, along Comanche Creek (Edgar Slough) behind the office of USFS Tree Improvement Center, 225 ft, T21N R2E S5 NW¼, 12 Jan. 1989, *L. P. Janeway 3653* (CHSC, WS); growing at the edge of the creek, often with blackberry brambles and partial shade from alders and valley oaks, common small patches and clumps of this along the creek edge, south end of Chico, along edge of Comanche Creek at the bicycle bridge (former railroad bridge) about 150 m southeast (upstream) of the Midway (road) bridge across the creek, 59 m, T22N R1E S36 SW¼ of SE¼, 39°42′47″N, 121°48′43″W, 20 June 2004, *L. P. Janeway 8137* (CDA, CHSC, JEPS, MICH).

Previous knowledge. Introduced from Europe; in North America previously only reported as naturalized at low elevation (less than 20 m) in Virginia and Washington (A. A. Reznicek, 2002, *in* Flora of North America North of Mexico, Volume 23, Magnoliophyta: Commelinidae (in part): Cyperaceae). This striking large clump-forming species is sold in the horticultural trade for water gardens, especially in the U.S. southeast. The first two collections noted above were originally identified as *Carex spissa* (L. P. Janeway, 1992, Cyperaceae of Butte County, California, Part 1: *Carex*). Janeway (loc. cit.) suggested that the original introduction was at the USFS Tree Improvement Center (now the Genetic Resource and Conservation Center) along Comanche Creek, the most upstream site at which the species was found. At that time the species was well established, in decreasing amounts, along 5 miles of Comanche Creek downstream of the Center. The third collection shows that the species is still well-established along Comanche Creek. This should be watched for its invasive potential downstream and into the Sacramento River.

Significance. First reports for California.

—Lawrence P. Janeway, Biological Sciences Herbarium, California State University, Chico, Chico, CA 95929-0515.

California

Delphinium scaposum Greene (RANUNCULACEAE).—San Bernardino Co., east side of Whipple Mountains: Just north of Gene Pumping Station along Black Meadow Landing Road, in a steep, rocky canyon through light-colored granite. Boulder-strewn slope above wash, ± north-facing. Some associated species were *Larrea tridentata, Fouquieria splendens* ssp. *splendens, Opuntia basilaris, O. acanthocarpa* var. *coloradensis, Hyptis emoryi, Encelia farinosa, Asclepias albicans, Trixis californica* var. *californica,* and *Peucephyllum schottii.* 34°18.219′N, 114°11.337′W, 269 m (881 ft). Gene Wash 7.5′ quadrangle. 17 March 2003, *S. J. De Groot & J. M. Porter 1411* (RSA; duplicate to be distributed); 29 March 2004, *S. J. De Groot 3964* (RSA); 11 April 2004, *S. J. De Groot 4128* (RSA; duplicate to be distributed).

Whipple Mountains: Ridge near highest peak, west side of the main part of the range, rocky slopes and outcrops. Associated with *Larrea tridentata, Krameria erecta, Lycium fremontii, Aloysia wrightii, Eriogonum fasciculatum* var. *polifolium, Galium stellatum* var. *eremicum,* and *Cheilanthes parryi.* 34°18′42″N, 114°24′10″W. 1055 m (3463 ft). Whipple Mountains SW 7.5′ quadrangle. 15 March 2004, *S. J. De Groot, K. De Groot, L. Lubinsky, L. L. Worlow 3627* (RSA).

Whipple Mountains: Wash south of highest peak, west side of the main part of the range, rocky bank of wash. Associated with *Mirabilis bigelovii* var. *retrorsa, Lycium andersonii, Muhlenbergia porteri, Eriogonum inflatum, Ditaxis neomexicana, Pholistoma auritum* var. *arizonicum, Larrea tridentata,* and *Krameria erecta.* 34°18′18″N, 114°23′59″W. 834 m (2737 ft). Whipple Mountains SW 7.5′ quadrangle. 14 March 2004, *S. J. De Groot, K. De Groot, L. Lubinsky, L. L. Worlow* 3590 (RSA).

Previous knowledge. Delphinium scaposum has been recorded from Arizona, New Mexico, Utah, Nevada, Colorado, and Sonora, Mexico (Welsh et al. 1987, Great Basin Naturalist Mem. 9:508–509; Kearney and Peebles 1960, Arizona Flora, University of California Press, Berkeley; Shreve and Wiggins 1964, Flora and Vegetation of the Sonoran Desert, Stanford University Press, Stanford). The species was originally described from New Mexico (Greene 1881, Bot. Gaz. 6:156–157). Typical habitats include grasslands, juniper woodlands, open deserts, gravelly mesas, and rocky or brushy ravines between 1200 and 2700 m (Warnock 1997, Delphinium, Fl. N. Amer. 3: 215, Oxford University Press, New York; Kearney and Peebles 1960; Ewan 1945, Univ. Colo. Phys. & Biol. Studies 2(2):55–244). It is generally found in sandy or gravelly soil (Kearney and Peebles 1960).

The nearest recorded collection sites are in Arizona along the Bill Williams River (*Munz 16640,* POM 303068) and the Colorado River, with no indication that *D. scaposum* may occur in California (Kearney and Peebles 1960; Ewan 1945). Another Arizona collection (*M. E. Jones s.n.,* 21 April 1903, POM 100717), cites the location "Chimehuevis," but this was an earlier name for the range now known as the Mohave Mountains, which lie to the northeast of Lake Havasu City in Arizona (Granger 1983, *Arizona's Names,* Falconer Publications, Tucson; Barnes 1935, Arizona Place Names, University of Arizona Bulletin 6(1), University of Arizona, Tucson; Jones 1908, Contr. W. Bot. 12:16, 50, 66; Lee W. Lenz personal communication).

Ewan (1945) distinguishes two races, a strictly scapose form with royal blue flowers that occurs along the Gila River drainage and Mogollon Mesa (race a), and a subscapose, often branching form with lighter blue flowers that occurs on the Colorado Plateau and Colorado River drainage (race b). The plants recently collected in the Whipple Mountains had royal blue flowers and a strictly scapose habit (race a), but were collected in the Colorado

River drainage (race b). The original material may have dispersed from the Gila drainage, but given the widely scattered occurrences of *D. scaposum* in the Whipple Mountains, this most likely did not happen in very recent history.

Significance. This is the first reported occurrence of *D. scaposum* from California. All of the collections were made from elevations below 1200 m, the species' presumed lower limit.

Erigeron oxyphyllus Greene (ASTERACEAE).—San Bernardino Co., east side of Whipple Mountains Wilderness area: chute below summit of Cupcake Butte, north of Whipple Wash. Plants were scattered among boulders in steep, narrow chute, approximately north facing. Also in the area were *Teucrium glandulosum, Cymopteris panamintensis* var. *acutifolius, Pleuraphis rigida, Pleurocoronis pluriseta, Machaeranthera pinnatifida* ssp. *gooddingii,* and *Matelea parviflora.* 34°20′49″N, 114°19′28″W, 790 m/2590 ft. Whipple Wash 7.5′ quadrangle, T3N R25E center of sec. 14. 10 October 2003, *Sarah J. De Groot & J. Mark Porter 3315* (RSA, duplicates to be distributed).

Whipple Mountains: North facing slope just north of summit, steep slope of loose rock and boulders. With *Antirrhinum filipes* and *Prenanthella exigua.* 34°19′55″N, 114°25′13″W, 646 m/2120 ft. Whipple Mountains SW 7.5′ quadrangle, T3N, R24E, S half of line between sect. 23 and 24. 9 May 2004, *Sarah J. De Groot 4286a* (RSA, duplicates to be distributed).

Previous knowledge. Erigeron oxyphyllus has been found in Maricopa, Mohave, Pinal, and Yuma counties, Arizona, and in Sonora, Mexico (Nesom 1992, Phytologia 72(3):194–195; Shreve and Wiggins 1964; Kearney and Peebles 1960). The type collection is from Yucca, in Mohave county (Nesom 1992; Greene 1895, Erythea 3(2): 20). Typical habitat is dry rocky hillsides, occasionally by seeps or streams, between 610 and 915 m (2000–3000 feet; Nesom 1992; Shreve and Wiggins 1964; Kearney and Peebles 1960).

Significance. This is the first report of *E. oxyphyllus* in California. Habitat was characteristic of sites where it is found in Arizona.

Thanks to J. Mark Porter for double-checking determinations.

—Sarah J. De Groot, Rancho Santa Ana Botanic Garden, 1500 N. College Avenue, Claremont, CA 91711.

California

Hoita macrostachya (DC.) Rydb. (FABACEAE).—Shasta Co., Little Backbone Creek inlet, Lake Shasta, approximately 4.4 km northwest of Shasta Dam in ponderosa pine/deerbrush habitat. Associated species include *Pinus ponderosa, Ceanothus integerrimus, Arctostaphylos viscida, Toxicodendron diversilobum,* and *Rubus discolor.* Bohemotash Mountain USGS 7.5′ quadrangle, T34N R5W SE¼ of SE¼ sect. 33, UTM 10 0548086E 4511789N, elevation 329 m, 31 July 2003, *L. Lindstrand III, K. Youngblood, s.n.* (North State Resources Herbarium [North State Resources, Inc. Herbarium, 5000 Bechelli Lane, Suite 203 Redding, CA 96002; private]; JEPS).

Mainstem of Lake Shasta between Little Backbone Creek and Butcher Creek, approximately 3.2 km northwest of Shasta Dam in mixed willow habitat. Associated species include *Salix exigua, Salix lucida, Rubus discolor, Pinus ponderosa, Arctostaphylos viscida,* and *Toxicodendron diversilobum.* Shasta Dam USGS 7.5′ quadrangle, T33N R5W NW¼ sect. 3, UTM 10 0548833E 4510649N, elevation 329 m, 31 July 2003, *L. Lindstrand III, K. Youngblood, s.n.* (North State Resources Herbarium [private]; JEPS).

City of Redding, Oregon Gulch, at the Oregon Gulch/Eastside Road crossing, approximately 0.75 km miles north of the Bonnyview Road/Highway 273 intersection in mixed riparian habitat. Associated species include *Salix exigua, Salix lucida, Salix gooddingii, Rubus discolor, Polygonum* sp., *Cyperus* sp., and *Vitis californica.* Redding USGS 7.5′ quadrangle, T31N R5W San Buenaventura Land Grant Boundary, UTM 10 0552005E 4488352N, elevation 183 m, 8 October 2004, *L. Lindstrand III, s.n.* (North State Resources Herbarium [private]; Shasta-Trinity National Forest Herbarium [Shasta-Trinity National Forest Herbarium, 3644 Avtech Parkway, Redding, CA 96002]; JEPS).

Previous knowledge. Hoita macrostachya was apparently collected only once from Shasta County, more than a century ago (M. S. Baker #286, July 5, 1898; JEPS 65632). This represents the northernmost-recorded extent of the species, whose range is restricted to California and Baja California (J. C. Hickman, 1993, The Jepson manual: higher plants of California, University of California Press, Berkeley, CA). The species was seen in vegetative condition by the second author in the Charlie Creek watershed, tributary to the upper Sacramento Arm of Lake Shasta, Lamoine USGS 7.5′ quadrangle, T35N R5W NE¼ S22, elevation 366 m, on 5 May 2000. Without flowers or fruit, this mystery plant was tentatively identified as *Hoita macrostachya,* but no voucher was made. Subsequently, the species was observed by the primary author near Salt Creek in a roadside wetland/ditch along Statton Road, northeast of the Salt Creek Group Campground, O'Brien USGS 7.5′ quadrangle, T35N R4W SW¼ S28, elevation approx. 365 m, during October 2003 but no voucher was made. During field investigations in 2003, North State Resources personnel collected a piece of *Hoita macrostachya* fruiting material for identification from the west side of Lake Shasta. The second author reviewed the material in the North State Resources office, which confirmed her earlier identification of the Charlie Creek material, and rekindled curiosity about the distribution of *Hoita macrostachya* in Shasta County. It was therefore of interest when North State Resources personnel found more *Hoita macrostachya* during further field investigations in 2003 and 2004 around the perimeter of the west side of Shasta Lake, near Salt Creek, and in the city of Redding.

Significance. Hoita macrostachya is still extant in Shasta County, though uncommon. The species has been collected or seen from five locations, all in the foothill drainages of the upper and lower Sacramento River along permanent or seasonal streams, or spring/seep features. Elevations at these locations range from 183 meters at Oregon Gulch to 366 meters at Charlie Creek.

Neviusia cliftonii J. R. Shevock, B. Ertter, & D. Taylor.

---

[1] North State Resources, Inc. Herbarium, 5000 Bechelli Lane, Suite 203 Redding, CA 96002.

[2] Shasta-Trinity National Forest Herbarium, 3644 Avtech Parkway, Redding, CA 96002.